

WHAT IS CLAIMED IS:

1. A method for moving a data object in a computer system from a first to a second storage location, the method comprising:
 - a) selecting a data object from the first storage location;
 - b) assigning at least one identifier (ID) to the selected data object;
 - c) storing the at least one ID in at least one lock object;
 - d) storing the data object at the second storage location and associating the second storage location with the at least one ID in the at least one lock object;
 - e) deleting the data object from the first storage location; and
 - f) deleting the at least one ID from the at least one lock object after the storing of the data object in the second storage location has been completed.
2. The method of claim 1, wherein
the data object comprises one or more fields of one or more tables and wherein
the at least one ID comprises one or more key fields of the one or more tables.
3. The method of claim 1, comprising:
storing the second storage location in the at least one lock object.
4. The method of claim 2, comprising:
storing the second storage location in the at least one lock object.
5. The method of claim 1, wherein assigning at least one identifier (ID) to the selected data object comprises:

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

assigning a first type of ID and a second type of ID to the data object; and
wherein storing the at least one ID in at least one object comprises
 storing the first type of ID in a first lock object;
 storing the second type of ID in a second lock object; and wherein deleting
the data object from the first storage location comprises:
 deleting the first type of ID from the first lock object after the data object has
been deleted from the first storage location; and
 deleting the second type of ID from the second lock object after the data
object has been stored in the second storage location.

6. The method of claim 5, wherein
the second type of ID is stored in the second lock object immediately after
assigning IDs to the data object.
7. The method of claim 5, wherein
the second type of ID is stored in the second lock object before the storing of
the data object at the second storage location is started.
8. The method of claim 5, wherein
the first type of ID is stored in the first lock object before the storing of the data
object at the second storage location is started.
9. The method of claim 6, wherein
the first type of ID is stored in the first lock object before the storing of the data
object at the second storage location is started.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

10. The method of claim 7, wherein

the first type of ID is stored in the first lock object before the storing of the data object at the second storage location is started.
11. The method of claim 1, further comprising:

checking before or while performing any of steps a) to c), whether the at least one ID has been stored in the lock object and, if yes, skipping at least step c).
12. The method of claim 5, further comprising:

checking before or while performing any of steps a) to d), whether the data object is stored in the second storage location and, if yes, skipping at least step d).
13. The method of claim 11, wherein

the checking is performed by querying a lock object.
14. The method of claim 12, wherein

the checking is performed by querying a lock object.
15. The method of claim 11, further comprising:

in case of a failure in step d), checking whether the data has been completely stored in the second storage location and, if the data has not been completely stored, skipping at least steps e) and f).
16. A computer system for moving a data object from a first to a second storage location, the system comprising:

memory having program instructions;

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

storage means for storing data;
at least one processor to execute the program instructions to perform operations comprising:
a) selecting a data object from the first storage location;
b) assigning at least one identifier (ID) to the selected data object;
c) storing the at least one ID in at least one lock object;
d) storing the data object at the second storage location and associating the second storage location with the at least one ID in the at least one lock object;
e) deleting the data object from the first storage location; and
f) deleting the at least one ID from the at least one lock object after the storing of the data object in the second storage location has been completed.

17. The computer system of claim 16, wherein
the data object comprises one or more fields of one or more tables and wherein
the at least one ID comprises one or more key fields of the one or more tables.
18. The computer system of claim 16, wherein the operations performed by the
processor comprise:
storing the second storage location in the at least one lock object.
19. The computer system of claim 17, wherein the operations performed by the
processor comprise:
storing the second storage location in the at least one lock object.
20. The computer system of claim 16, wherein assigning at least one identifier (ID)
to the selected data object comprises:

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

assigning a first type of ID and a second type of ID to the data object; and
wherein storing the at least one ID in at least one object comprises
storing the first type of ID in a first lock object;
storing the second type of ID in a second lock object; and wherein deleting
the data object from the first storage location comprises:
deleting the first type of ID from the first lock object after the data object has
been deleted from the first storage location; and
deleting the second type of ID from the second lock object after the data
object has been stored in the second storage location.

21. The computer system of claim 20, wherein
the second type of ID is stored in the second lock object immediately after
assigning IDs to the data object.
22. The computer system of claim 20, wherein
the second type of ID is stored in the second lock object before the storing of
the data object at the second storage location is started.
23. The computer system of claim 20, wherein
the first type of ID is stored in the first lock object before the storing of the data
object at the second storage location is started.
24. The computer system of claim 21, wherein
the first type of ID is stored in the first lock object before the storing of the data
object at the second storage location is started.

FINNegan
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

25. The computer system of claim 22, wherein
the first type of ID is stored in the first lock object before the storing of the data
object at the second storage location is started.
26. The computer system of claim 16, further comprising:
checking before or while performing any of steps a) to c), whether the at least
one ID has been stored in the lock object and, if yes, skipping at least step c).
27. The computer system of claim 20, further comprising:
checking before or while performing any of steps a) to d), whether the data
object is stored in the second storage location and, if yes, skipping at least step
d).
28. The computer system of claim 26, wherein
the checking is performed by querying a lock object.
29. The computer system of claim 27, wherein
the checking is performed by querying a lock object.
30. The computer system of claims 26, further comprising:
in case of a failure in step d), checking whether the data has been completely
stored in the second storage location and, if the data has not been completely
stored, skipping at least steps e) and f).
31. A computer-readable medium comprising instructions for moving data objects
in a computer system from a first to a second storage location, the medium
comprising instructions for:

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

- a) selecting a data object from the first storage location;
- b) assigning at least one identifier (ID) to the selected data object;
- c) storing the at least one ID in at least one lock object;
- d) storing the data object at the second storage location and associating the second storage location with the at least one ID in the at least one lock object;
- e) deleting the data object from the first storage location; and
- f) deleting the at least one ID from the at least one lock object after the storing of the data object in the second storage location has been completed.

32. The medium of claim 31, wherein assigning at least one identifier (ID) to the selected data object comprises:

assigning a first type of ID and a second type of ID to the data object; and
wherein storing the at least one ID in at least one object comprises

storing the first type of ID in a first lock object;

storing the second type of ID in a second lock object; and wherein deleting
the data object from the first storage location comprises:

deleting the first type of ID from the first lock object after the data object has
been deleted from the first storage location; and

deleting the second type of ID from the second lock object after the data
object has been stored in the second storage location.

33. A computer data signal embodied in a carrier wave comprising code for moving
a data object in a computer system from a first to a second storage location,
the code comprising instructions for:

- a) selecting a data object from the first storage location;
- b) assigning at least one identifier (ID) to the selected data object;
- c) storing the at least one ID in at least one lock object;
- d) storing the data object at the second storage location and associating the second storage location with the at least one ID in the at least one lock object;
- e) deleting the data object from the first storage location; and
- f) deleting the at least one ID from the at least one lock object after the storing of the data object in the second storage location has been completed.

34. A method for moving a data object in a computer system from a first to a second storage location, the method comprising:

- a) selecting a data object having at least one identifier (ID) from the first storage location;
- b) storing the at least one ID in at least one lock object;
- c) storing the data object at the second storage location and associating the second storage location with the at least one ID in the at least one lock object;
- d) deleting the data object from the first storage location; and
- e) deleting the at least one ID from the at least one lock object after the data object has been deleted from the first storage location; and
- f) deleting the at least one ID from the at least one lock object after the storing of the data object in the second storage location has been completed.

35. A method for a moving data object in a computer system from a first to a second storage location, the method comprising:

- a) selecting a data object from the first storage location;

- b) assigning an identifier (ID) of a first type to the selected data object;
- c) assigning an ID of a second type to the selected data object;
- d) storing the first type ID in a first lock object;
- e) storing the second type ID in a second lock object;
- f) storing the data object at the second storage location;
- g) deleting the data object from the first storage location;
- h) deleting the first type ID from the first lock object after the storing of the data object in the second storage location has been completed; and
- i) deleting the second type ID from the second lock object after the storing of the data object in the second storage location has been completed.

36. A method for moving a data object in a computer system from a first to a second storage location, the method comprising:

- a) selecting a data object having an identifier (ID) from the first storage location;
- b) storing the at least one ID in a first lock object;
- c) storing the at least one ID in a second lock object;
- d) storing the data object at the second storage location;
- e) deleting the data object from the first storage location; and
- f) deleting the at least one ID from the first lock object after the data object has been stored at the second storage location.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com